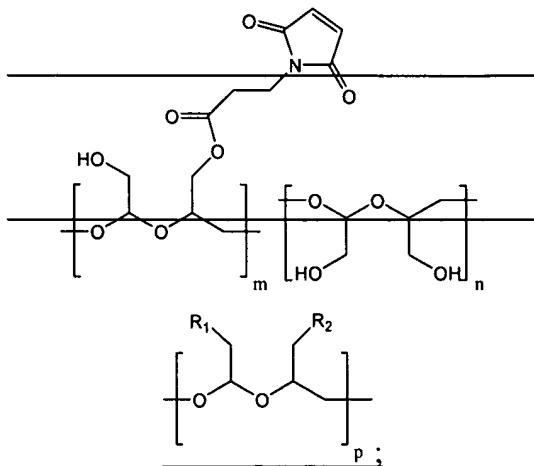


## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A biodegradable, biocompatible polyacetal derivative derived from exhaustive lateral oxidative cleavage of dextran, the polyacetal derivative having a chemical structure of the structure:



wherein p is an integer;

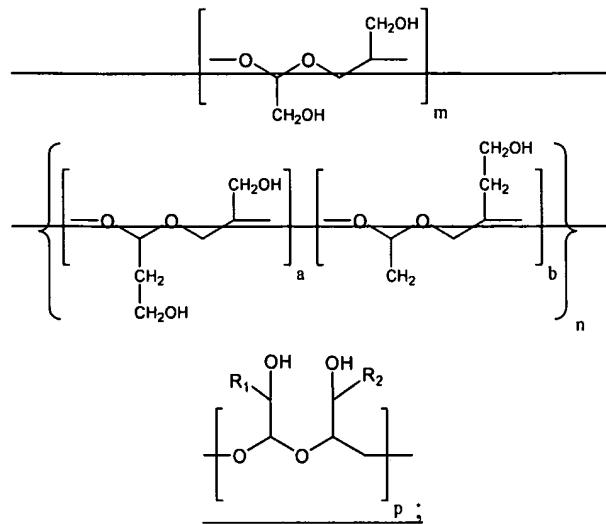
for n independent occurrences of the bracketed structure p, R<sub>1</sub> and R<sub>2</sub> are each hydroxyl;

for m independent occurrences of the bracketed structure p, one of R<sub>1</sub> and R<sub>2</sub> is hydroxyl, the other is a maleimidocarboxylate moiety;

the sum m+n=p; and

m:n is from 0.1:10 to 1:25.

2. (Currently Amended) A biodegradable, biocompatible polyacetal derivative derived from controlled lateral oxidative cleavage of dextran, the polyacetal derivative having a chemical structure of the structure:



wherein p is an integer;

each occurrence of R<sub>1</sub> and R<sub>2</sub> is independently hydrogen or -CH<sub>2</sub>OH; with the proviso that R<sub>1</sub> and R<sub>2</sub> cannot be both -CH<sub>2</sub>OH within the same bracketed structure p;

for m independent occurrences of the bracketed structure p, R<sub>1</sub> and R<sub>2</sub> are each hydrogen;

for n independent occurrences of the bracketed structure p, one of R<sub>1</sub> and R<sub>2</sub> is hydrogen, the other is -CH<sub>2</sub>OH;

the sum m+n=p; and

m:n is from 2:1 to 10:1.

3. **(Currently Amended)** A polyacetal-protein conjugate, wherein said conjugate is obtained by conjugation of a protein with the polyacetal is the derivative of claim 1.

4. **(Currently Amended)** A polyacetal-protein conjugate, wherein said conjugate is obtained by conjugation of a protein with the oxidized product of the polyacetal is the derivative of claim 2.

5. **(Original)** The polyacetal-protein conjugate of claim 3, wherein the protein is selected from the group consisting of an antibody, etanercept, insulin, gastrin, prolactin, adrenocorticotropic hormone (ACTH), thyroid stimulating hormone (TSH), luteinizing hormone (LH), follicle stimulating hormone (FSH), human chorionic gonadotropin (HCG), motilin, interferon alpha, interferon beta, interferon gamma, tumor necrosis factor (TNF), tumor necrosis factor-binding protein (TNF-bp), brain derived neurotrophic factor (BDNF), glial derived neurotrophic factor

(GDNF), neurotrophic factor 3 (NT3), fibroblast growth factors (FGF), neurotrophic growth factor (NGF), bone growth factors such as osteoprotegerin (OPG), insulin-like growth factors (IGFs), macrophage colony stimulating factor (M-CSF), granulocyte macrophage colony stimulating factor (GM-CSF), megakaryocyte derived growth factor (MGDF), keratinocyte growth factor (KGF), thrombopoietin, platelet-derived growth factor (PGDF), colony simulating growth factors (CSFs), bone morphogenetic protein (BMP), superoxide dismutase (SOD), tissue plasminogen activator (TPA), urokinase, streptokinase, kallikrein, flt3 ligand, CD40 ligand, thrombopoietin, calcitonin, Fas ligand, ligand for receptor activator of NF-kappa B (RANKL), tumor necrosis factor (TNF)-related apoptosis-inducing ligand (TRAIL), thymic stroma-derived lymphopoietin, mast cell growth factor, stem cell growth factor, epidermal growth factor, RANTES, growth hormone, insulinotropin, parathyroid hormone, glucagon, interleukins 1 through 18, colony stimulating factors, lymphotoxin-beta, leukemia inhibitory factor, oncostatin-M, an Eph receptor, and Ephrin ligands.

6. (Original) The polyacetal-protein conjugate of claim 4, wherein the protein is selected from the group consisting of an antibody, etanercept, insulin, gastrin, prolactin, adrenocorticotrophic hormone (ACTH), thyroid stimulating hormone (TSH), luteinizing hormone (LH), follicle stimulating hormone (FSH), human chorionic gonadotropin (HCG), motilin, interferon alpha, interferon beta, interferon gamma, tumor necrosis factor (TNF), tumor necrosis factor-binding protein (TNF-bp), brain derived neurotrophic factor (BDNF), glial derived neurotrophic factor (GDNF), neurotrophic factor3 (NT3), fibroblast growth factors (FGF), neurotrophic growth factor (NGF), bone growth factors such as osteoprotegerin (OPG), insulin-like growth factors (IGFs), macrophage colony stimulating factor (M-CSF), granulocyte macrophage colony stimulating factor (GM-CSF), megakaryocyte derived growth factor (MGDF), keratinocyte growth factor (KGF), thrombopoietin, platelet-derived growth factor (PGDF), colony simulating growth factors (CSFs), bone morphogenetic protein (BMP), superoxide dismutase (SOD), tissue plasminogen activator (TPA), urokinase, streptokinase, kallikrein, flt3 ligand, CD40 ligand, thrombopoietin, calcitonin, Fas ligand, ligand for receptor activator of NF-kappa B (RANKL), tumor necrosis factor (TNF)-related apoptosis-inducing ligand (TRAIL), thymic stroma-derived lymphopoietin, mast cell growth factor, stem cell growth factor, epidermal growth factor, RANTES, growth hormone, insulinotropin, parathyroid hormone, glucagon, interleukins 1

through 18, colony stimulating factors, lymphotoxin-beta, leukemia inhibitory factor, oncostatin-M, an Eph receptor, and Ephrin ligands.

7. **(Currently Amended)** A composition comprising a polyacetal-protein conjugate ~~selected from the group consisting of claims 3 and 4 of claim 3 or 4~~, and optionally a pharmaceutically acceptable carrier.

8. **(Currently Amended)** A ~~processes process~~ for preparing a biodegradable, biocompatible polyacetal polyacetal-protein conjugate, said process comprising: (a) ~~preparing providing~~ a polyacetal derivative of claim 1; (b) conjugating said polyacetal derivative to a protein to provide a polyacetal-protein conjugate; and (c) isolating said polyacetal-protein conjugate.

9. **(Currently Amended)** A method of treating obesity comprising administering an effective amount of a polyacetal-leptin conjugate to a patient in need thereof, wherein the polyacetal-leptin conjugate is derived from conjugation of leptin with the polyacetal derivative of claim 1.

10. **(Currently Amended)** A method of treating inflammation comprising administering an effective amount of a polyacetal-IL-1ra conjugate to a patient in need thereof, wherein the polyacetal-IL-1ra conjugate is derived from conjugation of IL-1ra with the polyacetal derivative of claim 1 or with the oxidized product of the polyacetal derivative of claim 2.

11. **(New)** A process for preparing a biodegradable, biocompatible polyacetal polyacetal-protein conjugate, said process comprising: (a) providing a polyacetal derivative of claim 2; (b) oxidizing the polyacetal derivative of step (a) to give an oxidized polyacetal derivative ; (c) conjugating the oxidized polyacetal derivative of step (b) to a protein to provide a polyacetal-protein conjugate; and (d) isolating said polyacetal-protein conjugate.

12. **(New)** The polyacetal derivative of claim 1, wherein the maleimidocarboxylate moiety is maleimidopropionate having the structure:

